

<110> Human Genome Sciences, Inc.

<120> B7-Like Polynucleotides, Polypeptides, and Antibodies

<130> PT124P1

<140> Unassigned

<141> 2001-12-20

<150> PCT/US01/20917

<151> 2001-06-29

<150> 60/215,135

<151> 2000-06-30

<150> 60/225,266

<151> 2000-08-14

<160> 49

<170> PatentIn Ver. 2.0

<210> 1

<211> 733

<212> DNA

<213> Homo sapiens

<400> 1

gggatccgga	gccc aaatct	tctgacaaaa	ctcacacatg	cccaccgtgc	ccagcacctg	60
aattcgaggg	tgacacgtca	gtcttcctct	tcccccaaa	acccaaggac	accctcatga	120
tctcccgga	tcctgaggtc	acatgcgtgg	tgggtggacg	aagccacgaa	gaccctgagg	180
tcaagttcaa	ctggtacgtg	gacggcgtgg	aggtgcataa	tgccaagaca	aagccgcggg	240
aggagcagta	caacagcacg	taccgtgtgg	tcagcgtcct	caccgtcctg	caccaggact	300
ggctgaatgg	caaggagtac	aagtgcgaag	tctccaacaa	agccctccca	accccatcgc	360
agaaaacat	ctccaaagcc	aaagggcagc	cccgagaacc	acaggtgtac	accctgcccc	420
catcccgga	tgagctgacc	aagaaccagg	tcagcctgac	ctgcctgggc	aaaggcttct	480
atccaagcga	catcgccgtg	gagtgggaga	gcaatgggca	gccgggagaa	aactacaaga	540
ccacgcctcc	cgtgctggac	tccgacggct	ccttcttctc	ctacagcaag	ctcaccgtgg	600
acaagagcag	gtggcagcag	gggaacgtct	tctcatgctc	cgtgatgcat	gaggctctgc	660
acaaccacta	cagcagaag	agcctctccc	tgtctccggg	taaatgagtg	cgacggccgc	720
gactctagag	gat					733

<210> 2

<211> 3357

<212> DNA

<213> Homo sapiens

<400> 2

caccagcagt	agtagcagaa	gcgaagagcg	caaacgcaac	cgctctcccc	gcgcgttggc	60
cgattcatta	atgcagctgg	cacgacaggt	ttcccgactg	gaaagcgggc	agtgagcgca	120
acgcaattaa	tgtgagttag	ctcactcatt	aggcacccca	ggctttacac	tttatgcttc	180
cggctcgat	gttgtgtgga	attgtgagcg	gataacaatt	tcacacagga	aacagctatg	240
accatgatta	cgccaagctc	gaaattaacc	ctcactaaa	ggaacaaaag	ctggagctcc	300
accgcggtgg	cggccgctct	agaactagt	gatcccccg	gctgcaggaa	ttcggcacga	360
gaggcagcgg	cagctccact	cagccagtag	ccagatagcg	tgggaacctt	ccccagccat	420
ggcttccctg	gggcagatcc	tcttctggag	cataattagc	atcatcatta	ttctggctgg	480
agcaattgca	ctcatcattg	gctttggtat	ttcaggggaga	cactccatca	cagtcactac	540

tgtggcaagt	cctcatatca	aatacagaac	atgatcttcc	tcctgctaata	gttgagcctg	300
gaattgcagc	ttcaccagat	agcagcttta	ttcacagtga	cagtcacctaa	ggaactgtac	360
ataatagagc	atggcagcaa	tgtgaccctg	gaatgcaact	ttgacactgg	aagtcatgtg	420
aaccttgtag	caataacagc	cagtttgcaa	aagggtggaa	atgatacatc	cccacaccgt	480
gaaagagcca	ctttgctgga	ggagcagctg	cccctagggg	aggcctcggt	ccacatacct	540
caagtccaag	tgagggacga	aggacagtgc	caatgcataa	tcattctatg	ggtcgcctgg	600
gactacaagt	acctgactct	gaaagtcaaa	gcttcctaca	ggaaaataaa	cactcacatc	660
ctaaagggtc	cagaaacaga	tgaggtagag	ctcacctgcc	aggctacagg	ttatcctctg	720
gcagaagtat	cctggccaaa	cgtcagcggt	cctgccaaca	ccagccactc	caggaccctt	780
gaaggcctct	accagggtcac	cagtgttctg	cgcctaaagc	caccccctgg	cagaaacttc	840
agctgtgtgt	tctggaatac	tcacgtgagg	gaacttactt	tggccagcat	tgaccttcaa	900
agtcagatgg	aacccaggac	ccatccaact	tggctgcttc	acattttcat	ccccctctgc	960
atcattgtct	tcattttcat	agccacagtg	atagccctaa	gaaaacaact	ctgtcaaaag	1020
ctgtattctt	caaaagacac	aacaaaaaga	cctgtcacca	caacaaagag	ggaagtgaac	1080
agtgcctgta	atctgaacct	gtggtcttgg	gagccagggt	gacctgatat	gacatctaaa	1140
gaagcttctg	gactctgaac	aagaattcgg	tggcctgcag	agcttgccat	ttgcactttt	1200
caaatgcctt	tggatgacct	agcactttaa	tctgaaacct	gcaacaagac	tagccaacac	1260
ctggccatga	aacttgcccc	ttcactgatc	tggactcacc	tctggagcct	atggctttta	1320
gcaagcacta	ctgcacttta	cagaattacc	ccactggatc	ctggaccac	agaattcctt	1380
caggatcctt	cttgctgcca	gactgaaagc	aaaaggaatt	atttccccct	aagttttcta	1440
agtgatttcc	aaaagcagag	gtgtgtggaa	atttccagta	acagaaacag	atgggttgcc	1500
aatagagtta	ttttttatct	atagcttctt	ctgggtacta	gaagaggcta	ttgagactat	1560
gagctcacag	acagggtctt	gcacaaactc	aatcataat	tgacatgttt	tatggattac	1620
tggaatcttg	atagcataat	gaagttgttc	taattaacag	agagcattta	aatatacaact	1680
aagtgcacaa	attgtggagt	aaagtcatca	agctctgttt	ttgaggtcta	agtcacaaag	1740
catttgtttt	aacctgtaat	ggcaccatgt	ttaatggtgg	tttttttttt	gaactacatc	1800
tttcttttaa	aaattattgg	tttcttttta	tttgttttta	ccttagaaat	caattatata	1860
cagtcaaaaa	tatttgatat	gtcctacatg	tgtatctgca	gcaatttcag	ataagtagct	1920
aaaatggcca	aagccccaaa	ctaagcctcc	ttttctggcc	ctcaatatga	ctttaaattt	1980
gacttttccag	tgcctcagtt	tgcacatctg	taatacagca	atgctaagta	gtcaaggcct	2040
ttgataattg	gcactatgga	aatcctgcaa	gatccacta	catatgtgtg	gagcagaagg	2100
gtaactcggc	tacagtaaca	gcttaatttt	gttaaatttg	ttctttatac	tggagccatg	2160
aagctcagag	cattagctga	cccttgaact	attcaaattg	gcacattagc	tagtataaca	2220
gacttacata	ggtgggccta	aagcaagctc	cttaactgag	caaaatttgg	ggcttatgag	2280
aatgaaaggg	tgtgaaattg	actaacagac	aaatcataca	tctcagtttc	tcaattctca	2340
tgtaaatcag	agaatgcctt	taaagaataa	aactcaattg	ttattcttca	aaaaaaaaaa	2400
aaaaaa						2406

<210> 4

<211> 3059

<212> DNA

<213> Homo sapiens

<400> 4

ggcacgagct	gtcatccggt	tccatgccgt	gagggtccatt	cacagaacac	atccatggct	60
ctcatgctca	gtttggttct	gagtctcctc	aagctgggat	cagggcagtg	gcaggtgttt	120
gggccagaca	agcctgtcca	ggccttggtg	ggggaggacg	cagcattctc	ctgtttcctg	180
tctcctaaga	ccaatgcaga	ggccatggaa	gtgcggttct	tcaggggcca	gttctctagc	240
gtggtccacc	tctacaggga	cggaaggac	cagccattta	tgcagatgcc	acagtatcaa	300
ggcaggacaa	aactggtgaa	ggattctatt	gcggaggggc	gcattctctc	gaggctggaa	360
aacattactg	tgttggtatg	tggcctctat	gggtgcagga	ttagttccca	gtcttactac	420
cagaaggcca	tctgggagct	acagggtgtc	gcactgggct	cagttcctct	catttccatc	480
gcgggatatg	ttgatagaga	catccagcta	ctctgtcagt	cctcgggctg	gttcccccg	540
cccacagcga	agtggaaagg	tccacaagga	caggatttgt	ccacagactc	caggacaaac	600
agagacatgc	atggcctgtt	tgatgtggag	atctctctga	ccgtccaaga	gaacgccggg	660
agcatatcct	gttccatgag	gcattgctcat	ctgagccgag	aggtggaatc	cagggtacag	720
ataggagact	ggagaagaaa	gcacggacag	gcaggtaaaa	gaaaatatct	ctcttcacac	780
atttatgact	cctttccaag	tctctcgttt	atggattttt	atattcctgag	gcccgtgggt	840

ccctgcagag	ccaagcttgt	gatgggaact	ctgaaattgc	agattctggg	ggaggtgcat	900
tttgtagaga	agccccatag	ccttcttcag	atctctggag	ggtccacaac	actcaaaaag	960
ggtcccaatc	cttgggtctt	cccttctccc	tgcgcctgt	ttcccacgtg	agcacggaac	1020
tgcctgctct	ctctgcttgc	tttcagaatt	gagagacgcc	cggaaacacg	caggtaccaa	1080
cgcctgagag	ggtaacagt	ggcatggagt	aggaagatga	ccagtgcacg	atatggagcc	1140
catccagctt	gtagacagca	aatctgtgat	gcccgaatcc	acccaggggt	gcagctgcct	1200
ctaaatacac	ttcttggccc	aggacttggg	gggaaaagcg	tagggactgg	gtcagctagg	1260
aggggtcaca	ggcaagacgc	cagggaactg	agggcattag	tagctggcct	ctaggggtct	1320
gtgcaaaggg	gaacgaagt	aagttagcag	gaactggtgg	gtggaaggaa	gctgaatcct	1380
ggagtcactc	aaggtctcac	aaagtcaaat	agagggctta	cgtgggaggg	cagtggtagg	1440
gctgggtgaa	catctcatgg	ttgagcatct	ccaagcatca	gtgaggcacg	ggggctgccc	1500
tggagaaggt	acatggctgg	tgggatagtg	ggactggccg	gacccctacc	ggagccagtc	1560
tgcagtggga	gggtcgacct	cttgctccag	cccagatttc	gtcttcagta	actcatgctt	1620
cctctctccc	ccaccgcacc	ccagtggagg	tgactctgga	tccagagacg	gctcaccga	1680
agctctgcgt	ttctgatctg	aaaactgtaa	cccatagaaa	agctcctcag	gaggtgcctc	1740
actctgagaa	gagatttaca	aggaagagt	tgggtggctt	tcagggtttc	caagcagggg	1800
aacattactg	ggaggtggac	gtgggacaaa	atgtagggtg	gtatgtggga	gtgtgtcggg	1860
atgacgtaga	cagggggaag	aacaatgtga	ctttgtctcc	caacaatggg	tattgggtcc	1920
tcagactgac	aacagaacat	ttgtatttca	cattcaatcc	ccattttatc	agcctcccc	1980
ccagcacccc	tcctacacga	gtaggggtct	tcctggacta	tgagggtggg	accatctcct	2040
tcttcaatac	aatgaccag	tccttattt	ataccctgct	gacatgtcag	tttgaaggct	2100
tgttgagacc	ctatatccag	catgcgatgt	atgacgagga	aaaggggact	cccatattca	2160
tatgtccagt	gtcctgggga	tgagacagag	aagaccctgc	ttaaagggcc	ccacaccaca	2220
gaccagaca	cagccaaggg	agagtgtctc	cgacaggtgg	ccccagcttc	ctctccggag	2280
cctgcgcaca	gagagtcacg	ccccccactc	tcctttaggg	agctgagggt	cttctgcctt	2340
gagccctgca	gcagcggcag	tcacagcttc	cagatgaggg	gggattggcc	tgaccctgtg	2400
ggagtcagaa	gccatggctg	ccctgaagt	gggacggaat	agactcacat	taggtttagt	2460
ttgtgaaaac	tccatccagc	taagcgatct	tgaacaagtc	acaacctccc	aggctcctca	2520
tttgctagtc	acggacagt	attcctgcct	cacaggtgaa	gattaaagag	acaacgaatg	2580
tgaatcatgc	ttgcaggttt	gagggccaca	gtgtttgcta	atggatgtgt	ttttatgatt	2640
atacattttc	cccaccataa	aactctgttt	gccttaattc	ccacattaat	ttacttttc	2700
ctcctatacc	caaatccacc	catggaatag	tttaattgga	cacctgcctt	tgtgaggctc	2760
caaagaataa	agaggaggta	ggatttttca	ctgattctat	aagcccagca	ttacctgata	2820
ccaaaaccag	gcaaagaaaa	cagaagaaga	ggaaggaaaa	ctacaggtcc	atatccctca	2880
ttaacacaga	cacaaaaatt	ctaaataaaa	ttttaacaaa	ttaaactaaa	caatatattt	2940
aaagatgata	tataactact	cagtgtgggt	tgtcccacaa	atgcagagtt	ggtttaatat	3000
ttaaatatca	accagtgtaa	ttcagcacat	taataaagta	aaaaaaaaaa	aaaaaaaaaa	3059

<210> 5

<211> 2682

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (2)

<223> n equals a,t,g, or c

<400> 5

nncacgagcc	tgtgcccctg	gaaaggttgg	agacttgggg	gacgactgga	gaattgccat	60
ttgaggacca	aaggagaaaa	gaaactacac	gctaattcta	gaaggcctcc	tgtccctgcc	120
tgctctgggt	gctcatggaa	ccagctgctg	ccctgcactt	ctcccggcca	gcctccctcc	180
tcctcctcct	cagcctgtgt	gcactgggtc	cagcccagtt	tactgtcgtg	gggccagcta	240

atccccatcct	ggccatgggtg	ggagaaaaaca	ctacattacg	ctgccatctg	tcacccgaga	300
aaaatgctga	ggacatggag	gtgcggtggt	tccggtctca	gttctcccc	gcagtgtttg	360
tgtataaggg	tgggagagag	agaacagagg	agcagatgga	ggagtaccgg	ggaagaatca	420
cctttgtgag	caaagacatc	aacaggggca	gcgtggccct	ggtcatacat	aacgtcacag	480
cccaggagaa	tgggatctac	cgctgttact	tccaagaagg	caggtcctac	gatgaggcca	540
tcctacgcct	cgtggtggca	ggccttggtg	ctaagccctt	cattgaaatc	aaggcccaag	600
aggatgggag	catctggctg	gagtgcata	ctggagggtg	gtacccagag	cccctcacag	660
tgtggaggga	cccctacggt	gaggttgtgc	ccgccctgaa	ggaggtttcc	atcgctgatg	720
ctgacggcct	cttcatgggtc	accacagctg	tgatcatcag	agacaagtat	gtgaggaatg	780
tgtcctgctc	tgtcaacaac	accctgctcg	gccaggagaa	ggaaactgtc	atttttattc	840
cagaatcctt	tatgcccagc	gcattctccct	ggatggtggc	cctagctgtc	atcctgaccg	900
catctccctg	gatggtgtcc	atgactgtca	tcttggtgtg	tttcatcatc	ttcatggctg	960
tcagcatctg	ttgcatcaag	aaacttcaaa	gggaaaaaaa	gattctgtca	ggggaaaaga	1020
aagttgaaca	agaggaaaaa	gaaattgcac	agcaacttca	agaagaattg	cgatggagaa	1080
gaacattctt	acatgctgct	gatgtggtcc	tggatccaga	caccgctcat	cccgagctct	1140
tcctgtcaga	ggaccggaga	agtgtgaggc	ggggccctta	caggcagaga	gtgcctgaca	1200
accagagag	attcgacagt	cagccttggtg	tcttgggatg	ggagagcttc	gcctcaggga	1260
aacattacag	gggaaacttc	acagagtggg	gaccaccag	agcctataga	atcaattcct	1320
tggactcaca	gccatgcaga	aagccctggc	catctcagca	gccaccgcac	aaccccccta	1380
atgaaagaca	cgccctcctc	ccctctgggtc	acgtaagaga	acatcttcca	gctgcctttt	1440
tcacacccac	tccagccctc	tgccccagtt	ttctcctcct	cactagtctg	tggctttagt	1500
agttcctttg	cttctaatta	tgggatggga	tccaggcata	gggaactagt	tgtttcatag	1560
ctcccagtc	aaaagaaagt	gagagaagct	gttgggcagc	gaacctactg	tttaaaatca	1620
ggataaccac	attaagccca	atatgccagt	tggcaccaga	tgctgtggac	ttggaatgag	1680
gccaacaggg	ttcaccagga	tgagagagga	gagaggaatc	cacaggacca	ccagaaggga	1740
gagggaacca	gatatgcaga	tcagagatag	aggaagtgtt	gagaggaaag	gggaggctct	1800
gctgattcct	cagaatggct	tctggaccct	ggagatgttt	ggaaaccaat	accggggcct	1860
gtcctcccc	gagaggattc	tccctttgaa	ggagtccctt	tgccgggtgg	gcgtcttctt	1920
ggactatgaa	gctggagatg	tctccttcta	caacatgagg	gacagatcac	acatctacac	1980
atgtccccgt	tcagccttta	atgtgcctgt	gaggccattc	ttcaggttag	ggtctgatga	2040
cagccccatc	ttcatctgcc	ctgcactcac	aggagccagt	ggggtcatgg	tgcttgaaga	2100
gggcctgaaa	cttcacagag	tggggaccca	ccaaggttgt	aaggatggct	aagtcccacc	2160
ataagagcta	aagggtcctg	ggagatgatg	gctcatttcc	acccaacccc	aggattttcca	2220
cagcacacac	ccacaggcct	ggacctggga	tgaagatgaa	tgaagaacat	ggactcatgt	2280
ggatgtgggt	tggctcagat	gtccctgcaa	taaacaagg	gtcagtactt	agtccctgag	2340
tgtggttgag	gtttgagggtc	ctgggtcgagc	agggcagtac	tggaccaggt	ctacgtcagc	2400
attcagggttc	aatggggaca	ccagtggctt	caaacttcct	gatctaatta	tgtttttaga	2460
cacttagaag	ttattgagga	ctttaaagaa	cttttgttta	tttgggttaa	tatttatgac	2520
atgtgaccat	tgaacaaaaa	atttaaaatg	ttatctttta	atttatgtta	aaatagcatt	2580
aataaatcag	ttatagggtta	atgtagatag	gatgttttgt	gaaaaagcaa	tctattgtgt	2640
ccaaataaaa	aaacaaaaag	tgtaaaaaaa	aaaaaaaaaa	aa		2682

<210> 6
 <211> 1726
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (1)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (2)
 <223> n equals a,t,g, or c

<400> 6

nncgattcgg	ctccaaactc	cggcgctgca	gccgatcggg	ctctggggccg	cgggtggggcac	60
cgcgcgagc	tagggagccg	agaaccgcgg	cgagccccga	ggacgcccag	agcgcgaggg	120
tcgctgcgcc	tcgcagagcc	ggagccgagt	cgagccgggc	gcccgggctg	cctggagacg	180
ccgtgacttt	gaagtgtaac	ttcaagacag	atgggcgcac	gcgggagatc	gtgtgggtacc	240
gggtgacgga	tgggtggcacc	atcaagcaaa	agatcttcac	cttcgacgcc	atgtttctcca	300
ccaactactc	acacatggag	aactaccgca	agcgagagga	cctgggtgtac	cagtccactg	360
tgaggctgcc	cgaggtccgg	atctcagaca	atgggtcccta	tgagtgccat	gtgggcatct	420
acgaccgcgc	caccagggag	aaggtgggtc	tggcatcagg	caacatcttc	ctcaacgtca	480
tggctcctcc	cacctccatt	gaagtgggtg	ctgctgacac	accagcccc	ttcagccgct	540
accaagccca	gaacttcacg	ctggctctgca	tcgtgtctgg	aggaaaaacca	gcacccatgg	600
tttattttcaa	acgagatggg	gaaccaatcg	acgcagtgcc	cctatcagag	ccaccagctg	660
cgagctccgg	ccccctacag	gacagcaggc	ccttcgcgag	ccttctgcac	cgtgacctgg	720
atgacaccaa	gatgcagaag	tcactgtccc	tcctggacgc	cgagaaccgg	ggtgggagac	780
cctacacgga	gcgccccctc	cgtggcctga	ccccagatcc	caacatcctc	ctccagccaa	840
ccacagagaa	cataccagag	acggtcgtga	gccgtgagtt	tccccgctgg	gtccacagcg	900
ccgagcccac	ctacttctctg	cgccacagcc	gcaccccgag	cagtgcaggc	actgtggaag	960
tacgtgccct	gctcacctgg	accctcaacc	cacagatcga	caacgaggcc	ctcttcagct	1020
gcgaggtcaa	gcacccagct	ctgtcgatgc	ccatgcaggc	agaggtcacg	ctggttgccc	1080
ccaaaggacc	caaaattgtg	atgacgcccc	gcagagcccc	ggtaggggac	acagtgagga	1140
ttctgggtcca	tgggttttcag	aacgaagtct	tccccgagcc	catgttcacg	tggacgcggg	1200
ttgggagccg	cctcctggac	ggcagcgtg	agttcgacgg	gaaggagctg	gtgctggagc	1260
gggttccccg	cgagctcaat	ggctccatgt	atcgctgcac	cgcccagaac	ccactgggct	1320
ccaccgacac	gcacaccggg	ctcatctgtt	ttgaaaaccc	aaatatccca	agaggaacgg	1380
aggactctaa	tgggtccatt	ggccccactg	gtgccccggt	caccttggtg	ctcgccctga	1440
cagtgattct	ggagctgacg	tgaaggcacc	cgccccggcc	actccatcag	gcactgacat	1500
ctccgcgacc	ggttttctatt	tcttttctaa	actatttcca	gtcttggtct	tagtctcttt	1560
ccatctgtgt	cttggtcttct	tcagtcgggt	taattaaaaac	aaacagaaca	attttcccca	1620
caaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1680
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaa		1726

<210> 7

<211> 1021

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (2)

<223> n equals a,t,g, or c

<400> 7

nncacgagcc	tgtgcccctg	gaaaggttgg	agacttgggg	gacgactgga	gaattgccat	60
ttgaggacca	aaggagaaaa	gaaactacac	gctaattcta	gaaggcctcc	tgtccctgcc	120
tgctctgggt	gctcatggaa	ccagctgctg	ccctgcactt	ctcccggcca	gcctccctcc	180
tcctcctect	cagcctgtgt	gcactggtct	cagcccaggt	cactgtcgtg	gggcccactg	240
atcccatcct	ggccatgggt	ggagaaaaca	ctacgttacg	atgctgtctg	tcacccgagg	300
aaaatgctga	ggacatggag	gtgcggtggg	tccagttctca	gttctcccc	gcagtgtttg	360
tgtataaggg	tggaagagag	agaacagagg	agcagaagga	ggagtaccga	gggagaacca	420
cctttgtgag	caaagacagc	aggggcagcg	tggccctgat	catacacaat	gtcacagccg	480
aggataacgg	catctaccag	tgttacttcc	aagaaggcag	gtcctgcaat	gaggccatcc	540
tgcaccttgg	ggtggcagac	cagcacaatc	ctctttctcg	gatccccatt	ccgcagggga	600
cactctccct	atgaaaagaa	gattccaggg	gaaaaatcct	tcctcctgca	caagggccac	660
catgagttag	tttgccctgc	taagccgtgg	gcttgacttc	ttgagaagca	catgcagaac	720

tcagttgagg	ccatgagccg	ggggaaaatg	gtgaatctcg	gaagagaagt	cctatgcctg	780
ccttagcact	gagctgtgca	cttctgagag	tgagaggaga	caccatcaat	aattgtcttg	840
ggacaactgg	aataaacagt	gactgcccag	agaactacga	tatttgaaat	cttatttctt	900
gatgaatatt	catcctgact	tctttcctga	aatgctgttt	gcaaagagag	tgactttatat	960
gtaagtagag	cgtttttatta	aagcaagact	taatacagaa	gcaaaaaaaaa	aaaaaaaaaaa	1020
a						1021

<210> 8
 <211> 1835
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (1)
 <223> n equals a,t,g, or c

<220>
 <221> SITE
 <222> (2)
 <223> n equals a,t,g, or c

<400> 8						
nnacatccat	ggctctaattg	ctcagtttgg	ttctgagctct	cctcaagctg	ggatcagggc	60
agtggcaggt	gtttgggcca	gacaagcctg	tccaggcctt	ggtgggggag	gacgcagcat	120
tctcctgttt	cctgtctcct	aagaccaatg	cagaggccat	ggaagtgcgg	ttcttcaggg	180
gccagttctc	tagcgtggtc	cacctctaca	gggacgggaa	ggaccagcca	tttatgcaga	240
tgccacagta	tcaaggcagg	acaaaactgg	tgaaggattc	tattgcggag	gggcgcactc	300
ctctgaggct	ggaaaacatt	actgtgttgg	atgctggcct	ctatgggtgc	aggattagtt	360
cccagtccta	ctaccagaag	gccatctggg	agctacaggt	gtcagcactg	ggctcagttc	420
ctctcatttc	catcacggga	tatgttgata	gagacatcca	gctactctgt	cagtcctcgg	480
gctggttccc	ccggcccaca	gcgaagtggg	aagggtccaca	aggacaggat	ttgtccacag	540
actccaggac	aaacagagac	atgcatggcc	tgtttgatgt	ggagatctct	ctgaccgtcc	600
aagagaacgc	cgggagcata	tcctgttcca	tgccggcatgc	tcactctgagc	cgagagggtg	660
aatccagggt	acagatagga	gatacctttt	tccagcctat	atcgtggcac	ctggctacca	720
aagtactggg	aataactctgc	tgtggcctat	tttttggcat	tgttggactg	aagattttct	780
tctccaaatt	ccagtggaaa	atccaggcgg	aactggactg	gagaagaaag	cacggacagg	840
cagaattgag	agacgcccgg	aaacacgcag	tggagggtgac	tctggatcca	gagacggctc	900
acccgaagct	ctgcgtttct	gatctgaaaa	ctgtaaccca	tagaaaagct	cccaggagg	960
tgccctcactc	tgagaagaga	tttacaagga	agagtgtggt	ggcttctcag	agtttccaag	1020
cagggaaaca	ttactgggag	gtggacggag	gacacaataa	aagggtggcgc	gtgggagtgt	1080
gccgggatga	tgtggacagg	aggaaggagt	acgtgacttt	gtctcccgat	catgggtact	1140
gggtcctcag	actgaatgga	gaacatttgt	atttcacatt	aaatccccgt	tttatcagcg	1200
tcttccccag	gacccacct	acaaaaatag	gggtcttcct	ggactatgag	tgtgggacca	1260
tctccttctt	caacataaat	gaccagtccc	ttattttatac	cctgacatgt	cggtttgaag	1320
gcttattgag	gccctacatt	gagtatccgt	cctataatga	gcaaaatgga	actcccagag	1380
acaagcaaca	gtgagtcctc	ctcacaggca	accacgccct	tcctccccag	gggtgaaatg	1440
taggatgaat	cacatcccac	attcttcttt	agggatatta	aggtctctct	cccagatcca	1500
aagtcctcga	gcagccggcc	aagggtggctt	ccagatgaag	ggggactggc	ctgtccacat	1560
gggagtcagg	tgtcatggct	gccctgagct	gggagggaag	aaggctgaca	ttacatttag	1620
tttgctctca	ctccatctgg	ctaagtgatc	ttgaaatacc	acctctcagg	tgaagaaccg	1680
tcaggaattc	ccatctcaca	ggctgtgggtg	tagattaagt	agacaaggaa	tgtgaataat	1740
gcttagatct	tattgatgac	agagtgtatc	ctaattggttt	gttcattata	ttacactttc	1800
agtaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaa			1835

<210> 9
 <211> 2626
 <212> DNA
 <213> Homo sapiens

<400> 9
 aattcggcac gagaggcagc ggcagctcca ctccagccagt acccaggata cgctggggaa 60
 ccttccccc gccatggctt ccctggggca gatcctcttc tggagcataa tttagcatca 120
 tcattattct ggctgaagca attgcactca tcattggctt tggatattca gggagacact 180
 ccatcacagt cactactgtc gcctcagctg ggaacattgg ggaggatgga atcctgagct 240
 gcacttttga acctgacatc aaactttctg atatcgtgat acaatggctg aaggaagggtg 300
 ttttaggctt ggtccatgag ttcaaagaag gccaaagatg agctgtcgga gcaggatgaa 360
 atgttcagag gccgggacag cagtgtttgc tgatcaagtg atagtgggca atgcctcttt 420
 tggcggtgaa aaacgtgcaa ctccacagatg ctggcaccta caaatgttat atcatcactt 480
 cttaaaggcaa ggggaatgct aaccttgagt ataaaactgg agccttcagc atgccggaag 540
 tgaatgtgga ctataatgcc agctcagaga ccttgcggtg tgaggctccc cgatgggtcc 600
 cccagcccac agtgggtctgg gcatcccaag ttgaccaggg agccaacttc tcggaagtct 660
 ccaataccag ctttgagctg aactctgaga atgtgaccat gaagggtgtg tctgtgctct 720
 acaatgttac gatcaacaac acatactcct gtatgattga aaatgacatt gccaaagcaa 780
 caggggatat caaagtgaca gaatcggaga tcaaaaggcg gagtcaccta cagctgctaa 840
 actcaaaggc ttctctgtgt gtctcttctt tctttgccat cagctgggca cttctgcctc 900
 tcagccctta cctgatgcta aaataatgtg ccttggccac aaaaaagcat gcaaagtcac 960
 tgttacaaca gggatctaca gaactatttc accaccagat atgacctagt tttatatattc 1020
 tgggaggaaa tgaattcata tctagaagtc tggagtgaag aaacaagagc aagaaacaaa 1080
 aagaagccaa aagcagaagg ctccaatatg aacaagataa atctatcttc aaagacatat 1140
 tagaagttgg gaaaataatt catgtgaact agacaagtgt gttaagagtg ataagtaaaa 1200
 tgcacgtgga gacaagtgca tccccagatc tcagggacct cccctgcct gtccactggg 1260
 gatgagagga caggatagtg catgttcttt gtctctgaat ttttagttat atgtgctgta 1320
 atgttgctct gaggaagccc ctggaaagtc tatcccaaca tatccacatc ttatatcca 1380
 caaatataagc tgtagtatgt accctaagac gctgctaate gactgccact tcgcaactca 1440
 ggggcggctg catttttagta atgggtcaaa tgattcactt tttatgatgc ttccaaaggt 1500
 gccttggctt ctcttcccaa ctgacaaaatg ccaaaagttg agaaaaatga tcataatttt 1560
 agcataaaca gagcaagtcg ggcacaccga ttttataaat aaactgagca cttctttttt 1620
 aaacaaacaa atgcgggttt atttctcaga tgatgttcat cccgtgaatg gtccagggaa 1680
 ggacctttca ccttgactat atggcattat gtcacacaa gctctgaggc ttctcctttc 1740
 catcctgcgt ggacagctaa gacctcagtt ttcaatagca tctagagcag tgggactcag 1800
 ctgggggtgat ttccgcccc atctocgggg gaatgtctga agacaatttt ggttacctca 1860
 atgagggagt ggaggaggat acagtgtctac taccaactag tggataaagg ccagggatgc 1920
 tgctcaaccc tcctaccatg tacaggacgt ctccccatta caactaccca atccgaagtg 1980
 tcaaactgtg tcaggactaa gaacccctgg ttttgagtag aaaagggcct ggaaagaggg 2040
 gagccaacaa atctgtctgc ttccctacat tagtcattgg caaataagca ttctgtctct 2100
 ttggctgctg cctcagcaca gagagccaga actctatcgg gcaccaggat aacatctctc 2160
 agtgaacaga gttgacaagg cctatgggaa atgcctgatg ggattatctt cagcttggtg 2220
 agcttctaag tttctttccc ttcatcttac cctgcaagcc aagttctgta agagaaatgc 2280
 ctgagttcta gctcagggtt tcttactctg aatttagatc tccagaccct tcctggccac 2340
 aattcaaatt aaggcaacaa acatatacct tccatgaagc acacacagac ttttgaaagc 2400
 aaggacaatg actgcttgaa ttgaggcctt gaggaatgaa gctttgaagg aaaagaatac 2460
 tttgtttcca gcccccttc cacactcttc atgtgttaac cactgccttc ctggaccttg 2520
 gagccacggt gactgtatta catgttgtaa tagaaaactg attttagagt tctgatcgtt 2580
 caagagaatg attaaatata catttcctaa aaaaaaaaa aaaaaa 2626

<210> 10
 <211> 1675
 <212> DNA
 <213> Homo sapiens

<220>
 <221> SITE

<222> (1549)

<223> n equals a,t,g, or c

<400> 10

gtacgacyca	ctatagggwg	agagctatga	cgtcgcatgc	acgcgtaasc	ttggggccct	60
cgagggatcc	tctagagcgg	cgcgcccttt	tttttttttt	tttgaagaat	aacaattgag	120
ttttattctt	taaaggcatt	ctctgattta	catgagaatt	gagaaactga	gatgtatgat	180
ttgtctgtta	gtcaattttca	caccctttca	ttctcataag	ccccaaattt	tgctcagtta	240
aggagcttgc	tttaggccca	cctatgtaag	tctgttatac	tagctaattgt	gcccatttga	300
atagttcaag	ggtcagctaa	tgctctgagc	ttcatggctc	cagtataaag	aacaaattta	360
acaaaattaa	gctgttactg	tagccgagtt	acccttctgc	tccacacata	tgtagtggga	420
tcttgcagga	tttccatagt	gccaattatc	aaaggccttg	actacttagc	attgctgtat	480
tacagatgtg	caaactgagg	cactgaaaag	tcaaatttaa	agtcataattg	agggccagaa	540
aaggaggctt	agtttggggc	tttggccatt	ttagctactt	atctgaaatt	gctgcagata	600
caacgtatga	gcataatcaa	tatttttgac	tgtatataat	tgattttctaa	ggtaaaaaca	660
aataaaaaga	aaccaataat	ttttaaagga	aagatgtagt	tcaaaaaaaa	aaccaccatt	720
aaacatgggtg	ccattacagg	ttaaaacaaa	tgctttgtga	cttagacctc	aaaaacagag	780
cttgatgact	ttactccaca	atttgtgcac	ttagtgtata	tttaaagtct	ctctgttaat	840
tagaacaact	tcattatgct	atcaagattc	cagtaatcca	taaaacatgt	caattatgat	900
ttgagtttgt	gcgaagccct	gtctgtgagc	tcatagtctc	aatagcctct	tctagtacct	960
agaggaagct	atagataaaa	aataactcta	ttggcaacct	atctgtttct	gttactggaa	1020
atttccacac	acctctgctt	ttggaaatca	cttagaaaac	ttgaggggaa	ataattcctt	1080
ttgcttttcag	tctggcagca	agaaggatcc	tgaagggaatt	ctgtgggtcc	aggatccagt	1140
ggggtaattc	tgtaaagtgc	agtagtgctt	gcttaaagcc	ataggctcca	gagggtgagtc	1200
cagatcagtg	aaggggcaag	tttcatggcc	aggtgttggc	tagtcttggt	gcagggtttca	1260
gattaaagtg	ctgggtcatc	caaaggcatt	tgaaaagtgc	aaatggcaag	ctctgcaggc	1320
caccgaattc	ttgttcagag	tccagaagct	tcttttagatg	tcatatcagg	tcacctgggc	1380
tcccaagacc	acagggttcag	atagcactgt	tcacttccct	ctttgtttgtg	gtgacaggtc	1440
tttttgttgt	gtcttttgaa	gaatacagct	tttgacagag	ttgttttctt	agggctrtca	1500
ckgkggctat	gaaaatgaaa	gcaatgatgc	aggaggggat	gaaaatgtna	agcagccaag	1560
ttggatgggt	cctgggttcc	atctgacttt	gaaggccaat	gctggccaaa	gtaagtccc	1620
tcacgtgagt	attccagaac	acacagctga	agtttctgcc	aggggtgggc	tttag	1675

<210> 11

<211> 786

<212> DNA

<213> Homo sapiens

<220>

<221> SITE

<222> (754)

<223> n equals a,t,g, or c

<220>

<221> SITE

<222> (778)

<223> n equals a,t,g, or c

<400> 11

ggaatgaaca	actttttcttc	tcttgaatat	atcttaacgc	caaattttga	gtgctttttt	60
gttacctcatc	ctcatatgtc	ccagctggaa	agaatcctgg	gttggagcta	ctgcatgttg	120
attgttttgt	ttttcctttt	ggctgttcat	tttgggtggc	actataagga	aatctaacac	180
aaacagcaac	tgttttttgt	tgtttacttt	tgcatcttta	cttgtggagc	tgtggcaagt	240
cctcatatca	aatacagaac	atgatcttcc	tcctgcta	gtttagcctg	gaattgcagc	300
ttcaccagat	agcagcttta	ttcacagtga	cagtccctaa	ggaactgtac	ataatagagc	360
atggcagcaa	tgtgaccctg	gaatgcaact	ttgacactgg	aagtcattgtg	aaccttgag	420
caataacagc	cagtttgcaa	aagggtggaaa	atgatacatc	cccacaccgt	gaaagagcca	480
ctttgctgga	ggagcagctg	cccctaggga	aggcctcggt	cccatmcctc	aagtycaagt	540

gagggacgaa	ggacagtacc	aatgcataat	catctatggg	gtcgccctggg	actacaagta	600
cctgactctg	aaagtcaaag	cttcctacag	gaaaataaac	actcacatcc	taaagggtcc	660
agaaacagat	gaggtagagc	tcacctgcca	ggctacaggt	tatcctctgg	cagaagtatc	720
ctggccaaac	gtcagcgttc	ctgccaaacac	cagncactcc	aggacccctg	aaggccntna	780
ccaggt						786

<210> 12
 <211> 2008
 <212> DNA
 <213> Homo sapiens

<400> 12						60
cgggggccttt	ctaacgggaa	aaactctact	aaagggttca	aaagctggag	ctccaccgcg	120
gtggcgcccg	ctctagaact	agtggatccc	ccgggctgca	ggaattcggc	acgagctcgt	180
gccgaattcg	gcacgagtca	cagaacacat	ccatggctct	matgctcagt	ttggttctga	240
gtctcctcaa	gctgggwtca	gggcagtggc	aggtgtttgg	gccagacaag	cctgtccagg	300
ccttggtggg	ggaggacgca	gcattctcct	gtttcctgtc	tcctaagacc	aatgcagagg	360
ccatggaagt	gcggttcttc	aggggccagt	tctctagcgt	ggtccacctc	tacagggacg	420
ggaaggacca	gccatttatg	cagatgccac	agtatcaagg	caggacaaaa	ctggtgaagg	480
attctattgc	ggagggggcg	atctctctga	ggctggaaaa	cattactgtg	ttggatgctg	540
gcctctatgg	gtgcaggatt	agttcccagt	cttactacca	gaaggccatc	tgggagctac	600
aggtgtcagc	actgggctca	gttcctctca	tttccatcac	gggatatgtt	gataagagaca	660
tccagctact	ctgtcagtc	tcgggctggg	tccccggcc	cacagcgaag	tggaaaggtc	720
cacaaggaca	ggatttgtcc	acagactcca	ggacaaacag	agacatgcat	ggcctgtttg	780
atgtggagat	ctctctgacc	gtccaagaga	acgccgggag	catatcctgt	tccatgcggc	840
atgctcatct	gagccgagag	gtggaatcca	gggtacagat	aggagatacc	tttttcgagc	900
ctatatcgtg	gmacctggyt	accaaagtac	tgggaatact	ctgctgtggc	ctattttttg	960
gcattgttgg	actgaagatt	ttctttctcca	aattccagt	gaaaatccag	gcggaactgg	1020
actggagaag	aaagcacgga	caggcagaat	tgagagacgc	ccggaaacac	gcagtggagg	1080
tgactctgga	tccagagacg	gctcaccgca	agctctgcgt	ttctgatctg	aaaactgtaa	1140
cccatagaaa	agctccccag	gaggtgcctc	actctgagaa	gagatttaca	aggaagagt	1200
tggtggcctt	tcagagtttc	caagcaggga	aacattactg	ggaggtggac	ggaggacaca	1260
ataaaaagggt	gcgcgtggga	gtgtgcccgg	atgatgtgga	caggaggaag	gagtacgtga	1320
ctttgtctcc	cgatcatggg	tactgggtcc	tcagactgaa	tggagaacat	ttgtatttca	1380
cattaaatcc	ccgttttatc	agcgtcttcc	ccaggacccc	acctacaaaa	ataggggtct	1440
tcctggacta	tgagtgtggg	accatctcct	tcttcaacat	aaatgaccag	tcccttattt	1500
ataccctgac	atgtcggttt	gaaggcttat	tgaggcccta	cattgagtat	ccgtcctata	1560
atgagcaaaa	tggaactccc	agagacaagc	aacagttagt	cctcctcaca	ggcaaccacg	1620
cccttctctc	ccagggttga	aatgtaggat	gaatcacatc	ccacattctt	ctttagggat	1680
attaaggctc	ctctcccaga	tccaaaagtc	cgcagcagcc	ggccaagggt	gcttccagat	1740
gaagggggac	tggcctgtcc	acatgggagt	caggtgtcat	ggctgcccct	agctgggagg	1800
gaagaaggct	gacattacat	ttagtttgct	ctcactccat	ctggctaagt	gatcttgaaa	1860
taccacctct	caggtgaaga	accgtcagga	attcccattc	cacaggctgt	ggtgtagatt	1920
aagtagacaa	ggaatgtgaa	taatgcttag	atcttattga	tgacagagt	tatcctaatt	1980
gtttgttcat	tatattacac	tttcagtaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaamc	2008
tcgagggggg	gccccgtacc	caattcgg				

<210> 13
 <211> 2799
 <212> DNA
 <213> Homo sapiens

<400> 13						60
tgggacactg	tggaagccca	gagaatctga	tccccgggtcc	cacaacttca	catatcgcca	120
gtaagtggga	ggcaaagaaa	attctttttc	tctctttttg	ggacagtttg	tgactagtaa	180
tgccctgtg	cctggaaagg	ttggagactt	gggggacgac	tggagaattg	ccatttgagg	240
accaaaggag	aaaagaaact	acacgcta	tctagaaggc	ctcctgtccc	tgccctgctc	

gggtgctcat	ggaaccagct	gctgccttgc	acttctcccg	gccagcctcc	ctcctcctcc	300
tcctcagcct	gtgtgcactg	gtctcagccc	agtttactgt	cgtggggcca	gctaatacca	360
tcctggccat	ggtgggagaa	aacactacat	tacgttgcca	tctgtcacc	gagaaaaatg	420
ctgaggacat	ggaggtgcgg	tggttccggt	ctcagttctc	ccccgcagtg	tttgtgtata	480
aggggtgggag	agagagaaca	gaggagcaga	tggaggagta	ccggggaaga	atcacctttg	540
tgagcaaaga	catcaacagg	ggcagcgtgg	ccctggtcat	acataacgtc	acagcccagg	600
agaatgggat	ctaccgctgt	tacttccaag	aaggcaggtc	ctacgatgag	gccatcctac	660
gcctcgtggt	ggcaggcctt	gggtctaagc	ccctcattga	aatcaaggcc	caagaggatg	720
ggagcatctg	gctggagtgc	atatctggag	ggtggtaccc	agagcccctc	acagtgtgga	780
gggaccacct	cggtgaggtt	gtgcccgcgc	tgaaggaggt	ttccatcgct	gatgtgtacg	840
gcctcttcat	ggtcaccaca	gctgtgatca	tcagagacaa	gtatgtgagg	aatgtgtcct	900
gctctgtcaa	caacaccctg	ctcgccagag	agaaggaaac	tgatcatttt	attccagaat	960
cctttatgcc	cagcgcactc	ccctggatgg	tggccctagc	tgatcatcctg	accgcatctc	1020
cctggatggg	gtccatgact	gtgttctcctg	ctgttttcat	catcttcatg	gctgtcagca	1080
tctgttgcat	caagaaaactt	caaaggga	aaaagattct	gtcaggggaa	aagaaagtgtg	1140
aacaagagga	aaaagaaatt	gcacagcaac	ttcaagaaga	attgcatgag	agaagaacat	1200
tcttacatgc	tgctgatgtg	gtcctggatc	cagacaccgc	tcaccccgag	ctcttcctgt	1260
cagaggaccg	gagaagtgtg	aggcgggggc	cctacaggca	gagagtgcct	gacaacccag	1320
agagattcga	cagtcagcct	tgtgtcctgg	gatgggagag	cttcgcctca	gggaaacatt	1380
acaggggaaa	cttcacagag	tggggaccca	ccagagccta	tagaatcaat	tccttggact	1440
cacagccatg	cagataagcc	ctggccatct	cagcagccac	cgcaaacacc	ccctaatagaa	1500
agacacgccc	tcctccccctc	tggtcacgta	agagaacatc	ttccagctgc	ctttttcaca	1560
cccactccag	ccctctgccc	cagttttctc	ctctcacta	gtctgtggct	ttagtagttc	1620
ctttgcttgt	aattatggga	tgggatccag	gcataaggaa	ctagtgtgtt	catagctccc	1680
agtcaaaaag	aaagtggagag	aagctgttgg	gcagcgaacc	tactgtttaa	aatcaggata	1740
accacattaa	gccaatatg	ccagttggca	ccagatgctg	tggacttgga	atgaggccaa	1800
cagggttcac	caggatgaga	gaggagagag	gaatccacag	gaccaccaga	aggagagggg	1860
aaccagatat	gcagatcaga	gatagaggaa	gtgttgagag	gaaaggggag	gtcctgctga	1920
ttcctcagaa	tggcttcttg	accctggaga	tgtttgga	ccaataccgg	gccctgtcct	1980
cccctgagag	gatttctcct	ttgaaggagt	ccctttgccg	ggtgggcgtc	ttcctggact	2040
atgaagctgg	agatgtctcc	ttctacaaca	tgagggacag	atcacacatc	tacacatgtc	2100
cccgttcagc	ctttactgtg	cctgtgaggc	ccttcttcag	gttaggggtc	gatgacagcc	2160
ccatcttcat	ctgccctgca	ctcacaggag	ccagtggggt	catgggtgcct	gaagagggcc	2220
tgaacttca	cagagtgggg	accaccaag	gttgtaaggg	atggctaagt	cccaccataa	2280
gagctaaagg	gtcctgggag	atgatggctc	atttccaccc	aacccagga	tttccacagc	2340
acacaccac	aggcctggac	ctgggatgaa	gatgaatgaa	gaacatggac	tcagtgtgat	2400
gtggtttggc	tcagatgtcc	ctgcaataaa	caaggggtca	gtacttagtc	cctgagtgtg	2460
gttgaggttt	gaggtcctgg	tcgagcaggg	cagtactgga	ccaggtctac	gtcagcattc	2520
aggttcaatg	ggggacacca	gtggcttcaa	acttctctgat	ctaattatgt	tttagacac	2580
ttagaagtta	ttgaggactt	taaagaactt	ttgtttattt	gggttaatat	ttatgacatt	2640
tgaccattga	aacaaaaatt	taaaatgtta	tcttttaatt	tatgttaaaa	tagcattaat	2700
aaatcagtta	taggttaatg	tagataggat	gttttgtgaa	aaagcaatct	attgtgtcca	2760
aataaaaaaa	caaaaagtgt	aaaaaaaaa	aaaaaaaaa			2799

<210> 14
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 14
 Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile Ile
 1 5 10 15
 Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly Ile Ser
 20 25 30
 Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala Gly Asn Ile
 35 40 45

Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro Asp Ile Lys Leu
 50 55 60
 Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly Val Leu Gly Leu Val
 65 70 75 80
 His Glu Phe Lys Glu Gly Lys Asp Glu Leu Ser Glu Gln Asp Glu Met
 85 90 95
 Phe Arg Gly Arg Thr Ala Val Phe Ala Asp Gln Val Ile Val Gly Asn
 100 105 110
 Ala Ser Leu Arg Leu Lys Asn Val Gln Leu Thr Asp Ala Gly Thr Tyr
 115 120 125
 Lys Cys Tyr Ile Ile Thr Ser Lys Gly Lys Gly Asn Ala Asn Leu Glu
 130 135 140
 Tyr Lys Thr Gly Ala Phe Ser Met Pro Glu Val Asn Val Asp Tyr Asn
 145 150 155 160
 Ala Ser Ser Glu Thr Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln
 165 170 175
 Pro Thr Val Val Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser
 180 185 190
 Glu Val Ser Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met
 195 200 205
 Lys Val Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser
 210 215 220
 Cys Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val
 225 230 235 240
 Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn Ser
 245 250 255
 Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp Ala Leu
 260 265 270
 Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
 275 280

<210> 15
 <211> 283
 <212> PRT
 <213> Homo sapiens

<400> 15
 Met Ile Phe Leu Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln
 1 5 10 15
 Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
 20 25 30

Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
 35 40 45
 His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
 50 55 60
 Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
 65 70 75 80
 Pro Leu Gly Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp
 85 90 95
 Glu Gly Gln Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr
 100 105 110
 Lys Tyr Leu Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr
 115 120 125
 His Ile Leu Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln
 130 135 140
 Ala Thr Gly Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val
 145 150 155 160
 Pro Ala Asn Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val
 165 170 175
 Thr Ser Val Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys
 180 185 190
 Val Phe Trp Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp
 195 200 205
 Leu Gln Ser Gln Met Glu Pro Arg Thr His Pro Thr Trp Leu Leu His
 210 215 220
 Ile Phe Ile Pro Ser Cys Ile Ile Ala Phe Ile Phe Ile Ala Thr Val
 225 230 235 240
 Ile Ala Leu Arg Lys Gln Leu Cys Gln Lys Leu Tyr Ser Ser Lys Asp
 245 250 255
 Thr Thr Lys Arg Pro Val Thr Thr Thr Lys Arg Glu Val Asn Ser Ala
 260 265 270
 Val Asn Leu Asn Leu Trp Ser Trp Glu Pro Gly
 275 280

<210> 16
 <211> 318
 <212> PRT
 <213> Homo sapiens

<400> 16
 Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly Ser
 1 5 10 15
 Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala Leu Val

20					25					30					
Gly	Glu	Asp	Ala	Ala	Phe	Ser	Cys	Phe	Leu	Ser	Pro	Lys	Thr	Asn	Ala
		35					40					45			
Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Gly	Gln	Phe	Ser	Ser	Val	Val
	50					55					60				
His	Leu	Tyr	Arg	Asp	Gly	Lys	Asp	Gln	Pro	Phe	Met	Gln	Met	Pro	Gln
65					70					75					80
Tyr	Gln	Gly	Arg	Thr	Lys	Leu	Val	Lys	Asp	Ser	Ile	Ala	Glu	Gly	Arg
				85					90					95	
Ile	Ser	Leu	Arg	Leu	Glu	Asn	Ile	Thr	Val	Leu	Asp	Ala	Gly	Leu	Tyr
			100					105					110		
Gly	Cys	Arg	Ile	Ser	Ser	Gln	Ser	Tyr	Tyr	Gln	Lys	Ala	Ile	Trp	Glu
		115					120					125			
Leu	Gln	Val	Ser	Ala	Leu	Gly	Ser	Val	Pro	Leu	Ile	Ser	Ile	Ala	Gly
	130					135					140				
Tyr	Val	Asp	Arg	Asp	Ile	Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe
145					150					155					160
Pro	Arg	Pro	Thr	Ala	Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser
				165					170					175	
Thr	Asp	Ser	Arg	Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu
			180					185					190		
Ile	Ser	Leu	Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met
		195					200					205			
Arg	His	Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly
	210					215					220				
Asp	Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Gly	Lys	Arg	Lys	Tyr	Ser	Ser
225					230					235					240
Ser	His	Ile	Tyr	Asp	Ser	Phe	Pro	Ser	Leu	Ser	Phe	Met	Asp	Phe	Tyr
				245					250					255	
Ile	Leu	Arg	Pro	Val	Gly	Pro	Cys	Arg	Ala	Lys	Leu	Val	Met	Gly	Thr
			260					265					270		
Leu	Lys	Leu	Gln	Ile	Leu	Gly	Glu	Val	His	Phe	Val	Glu	Lys	Pro	His
		275					280					285			
Ser	Leu	Leu	Gln	Ile	Ser	Gly	Gly	Ser	Thr	Thr	Leu	Lys	Lys	Gly	Pro
	290					295					300				
Asn	Pro	Trp	Ser	Phe	Pro	Ser	Pro	Cys	Ala	Leu	Phe	Pro	Thr		
305					310					315					

<210> 17
<211> 454

<212> PRT
 <213> Homo sapiens

<400> 17

Met	Glu	Pro	Ala	Ala	Ala	Leu	His	Phe	Ser	Arg	Pro	Ala	Ser	Leu	Leu	1	5	10	15
Leu	Leu	Leu	Ser	Leu	Cys	Ala	Leu	Val	Ser	Ala	Gln	Phe	Thr	Val	Val	20	25	30	
Gly	Pro	Ala	Asn	Pro	Ile	Leu	Ala	Met	Val	Gly	Glu	Asn	Thr	Thr	Leu	35	40	45	
Arg	Cys	His	Leu	Ser	Pro	Glu	Lys	Asn	Ala	Glu	Asp	Met	Glu	Val	Arg	50	55	60	
Trp	Phe	Arg	Ser	Gln	Phe	Ser	Pro	Ala	Val	Phe	Val	Tyr	Lys	Gly	Gly	65	70	75	80
Arg	Glu	Arg	Thr	Glu	Glu	Gln	Met	Glu	Glu	Tyr	Arg	Gly	Arg	Ile	Thr	85	90	95	
Phe	Val	Ser	Lys	Asp	Ile	Asn	Arg	Gly	Ser	Val	Ala	Leu	Val	Ile	His	100	105	110	
Asn	Val	Thr	Ala	Gln	Glu	Asn	Gly	Ile	Tyr	Arg	Cys	Tyr	Phe	Gln	Glu	115	120	125	
Gly	Arg	Ser	Tyr	Asp	Glu	Ala	Ile	Leu	Arg	Leu	Val	Val	Ala	Gly	Leu	130	135	140	
Gly	Ser	Lys	Pro	Leu	Ile	Glu	Ile	Lys	Ala	Gln	Glu	Asp	Gly	Ser	Ile	145	150	155	160
Trp	Leu	Glu	Cys	Ile	Ser	Gly	Gly	Trp	Tyr	Pro	Glu	Pro	Leu	Thr	Val	165	170	175	
Trp	Arg	Asp	Pro	Tyr	Gly	Glu	Val	Val	Pro	Ala	Leu	Lys	Glu	Val	Ser	180	185	190	
Ile	Ala	Asp	Ala	Asp	Gly	Leu	Phe	Met	Val	Thr	Thr	Ala	Val	Ile	Ile	195	200	205	
Arg	Asp	Lys	Tyr	Val	Arg	Asn	Val	Ser	Cys	Ser	Val	Asn	Asn	Thr	Leu	210	215	220	
Leu	Gly	Gln	Glu	Lys	Glu	Thr	Val	Ile	Phe	Ile	Pro	Glu	Ser	Phe	Met	225	230	235	240
Pro	Ser	Ala	Ser	Pro	Trp	Met	Val	Ala	Leu	Ala	Val	Ile	Leu	Thr	Ala	245	250	255	
Ser	Pro	Trp	Met	Val	Ser	Met	Thr	Val	Ile	Leu	Ala	Val	Phe	Ile	Ile	260	265	270	
Phe	Met	Ala	Val	Ser	Ile	Cys	Cys	Ile	Lys	Lys	Leu	Gln	Arg	Glu	Lys	275	280	285	

Lys Ile Leu Ser Gly Glu Lys Lys Val Glu Gln Glu Glu Lys Glu Ile
 290 295 300
 Ala Gln Gln Leu Gln Glu Glu Leu Arg Trp Arg Arg Thr Phe Leu His
 305 310 315 320
 Ala Ala Asp Val Val Leu Asp Pro Asp Thr Ala His Pro Glu Leu Phe
 325 330 335
 Leu Ser Glu Asp Arg Arg Ser Val Arg Arg Gly Pro Tyr Arg Gln Arg
 340 345 350
 Val Pro Asp Asn Pro Glu Arg Phe Asp Ser Gln Pro Cys Val Leu Gly
 355 360 365
 Trp Glu Ser Phe Ala Ser Gly Lys His Tyr Arg Gly Asn Phe Thr Glu
 370 375 380
 Trp Gly Pro Thr Arg Ala Tyr Arg Ile Asn Ser Leu Asp Ser Gln Pro
 385 390 395 400
 Cys Arg Lys Pro Trp Pro Ser Gln Gln Pro Pro His Asn Pro Pro Asn
 405 410 415
 Glu Arg His Ala Leu Leu Pro Ser Gly His Val Arg Glu His Leu Pro
 420 425 430
 Ala Ala Phe Phe Thr Pro Thr Pro Ala Leu Cys Pro Ser Phe Leu Leu
 435 440 445
 Leu Thr Ser Leu Trp Leu
 450

<210> 18
 <211> 414
 <212> PRT
 <213> Homo sapiens

<400> 18
 Met Arg Glu Ile Val Trp Tyr Arg Val Thr Asp Gly Gly Thr Ile Lys
 1 5 10 15
 Gln Lys Ile Phe Thr Phe Asp Ala Met Phe Ser Thr Asn Tyr Ser His
 20 25 30
 Met Glu Asn Tyr Arg Lys Arg Glu Asp Leu Val Tyr Gln Ser Thr Val
 35 40 45
 Arg Leu Pro Glu Val Arg Ile Ser Asp Asn Gly Pro Tyr Glu Cys His
 50 55 60
 Val Gly Ile Tyr Asp Arg Ala Thr Arg Glu Lys Val Val Leu Ala Ser
 65 70 75 80
 Gly Asn Ile Phe Leu Asn Val Met Ala Pro Pro Thr Ser Ile Glu Val
 85 90 95

Val Ala Ala Asp Thr Pro Ala Pro Phe Ser Arg Tyr Gln Ala Gln Asn
 100 105 110
 Phe Thr Leu Val Cys Ile Val Ser Gly Gly Lys Pro Ala Pro Met Val
 115 120 125
 Tyr Phe Lys Arg Asp Gly Glu Pro Ile Asp Ala Val Pro Leu Ser Glu
 130 135 140
 Pro Pro Ala Ala Ser Ser Gly Pro Leu Gln Asp Ser Arg Pro Phe Arg
 145 150 155 160
 Ser Leu Leu His Arg Asp Leu Asp Asp Thr Lys Met Gln Lys Ser Leu
 165 170 175
 Ser Leu Leu Asp Ala Glu Asn Arg Gly Gly Arg Pro Tyr Thr Glu Arg
 180 185 190
 Pro Ser Arg Gly Leu Thr Pro Asp Pro Asn Ile Leu Leu Gln Pro Thr
 195 200 205
 Thr Glu Asn Ile Pro Glu Thr Val Val Ser Arg Glu Phe Pro Arg Trp
 210 215 220
 Val His Ser Ala Glu Pro Thr Tyr Phe Leu Arg His Ser Arg Thr Pro
 225 230 235 240
 Ser Ser Asp Gly Thr Val Glu Val Arg Ala Leu Leu Thr Trp Thr Leu
 245 250 255
 Asn Pro Gln Ile Asp Asn Glu Ala Leu Phe Ser Cys Glu Val Lys His
 260 265 270
 Pro Ala Leu Ser Met Pro Met Gln Ala Glu Val Thr Leu Val Ala Pro
 275 280 285
 Lys Gly Pro Lys Ile Val Met Thr Pro Ser Arg Ala Arg Val Gly Asp
 290 295 300
 Thr Val Arg Ile Leu Val His Gly Phe Gln Asn Glu Val Phe Pro Glu
 305 310 315 320
 Pro Met Phe Thr Trp Thr Arg Val Gly Ser Arg Leu Leu Asp Gly Ser
 325 330 335
 Ala Glu Phe Asp Gly Lys Glu Leu Val Leu Glu Arg Val Pro Ala Glu
 340 345 350
 Leu Asn Gly Ser Met Tyr Arg Cys Thr Ala Gln Asn Pro Leu Gly Ser
 355 360 365
 Thr Asp Thr His Thr Arg Leu Ile Val Phe Glu Asn Pro Asn Ile Pro
 370 375 380
 Arg Gly Thr Glu Asp Ser Asn Gly Ser Ile Gly Pro Thr Gly Ala Arg
 385 390 395 400
 Leu Thr Leu Val Leu Ala Leu Thr Val Ile Leu Glu Leu Thr
 405 410

<210> 19
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 19
 Met Glu Pro Ala Ala Ala Leu His Phe Ser Arg Pro Ala Ser Leu Leu
 1 5 10 15
 Leu Leu Leu Ser Leu Cys Ala Leu Val Ser Ala Gln Val Thr Val Val
 20 25 30
 Gly Pro Thr Asp Pro Ile Leu Ala Met Val Gly Glu Asn Thr Thr Leu
 35 40 45
 Arg Cys Cys Leu Ser Pro Glu Glu Asn Ala Glu Asp Met Glu Val Arg
 50 55 60
 Trp Phe Gln Ser Gln Phe Ser Pro Ala Val Phe Val Tyr Lys Gly Gly
 65 70 75 80
 Arg Glu Arg Thr Glu Glu Gln Lys Glu Glu Tyr Arg Gly Arg Thr Thr
 85 90 95
 Phe Val Ser Lys Asp Ser Arg Gly Ser Val Ala Leu Ile Ile His Asn
 100 105 110
 Val Thr Ala Glu Asp Asn Gly Ile Tyr Gln Cys Tyr Phe Gln Glu Gly
 115 120 125
 Arg Ser Cys Asn Glu Ala Ile Leu His Leu Val Val Ala Asp Gln His
 130 135 140
 Asn Pro Leu Ser Trp Ile Pro Ile Pro Gln Gly Thr Leu Ser Leu
 145 150 155

<210> 20
 <211> 461
 <212> PRT
 <213> Homo sapiens

<400> 20
 Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly Ser
 1 5 10 15
 Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala Leu Val
 20 25 30
 Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys Thr Asn Ala
 35 40 45
 Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe Ser Ser Val Val
 50 55 60
 His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe Met Gln Met Pro Gln
 65 70 75 80

Tyr	Gln	Gly	Arg	Thr	Lys	Leu	Val	Lys	Asp	Ser	Ile	Ala	Glu	Gly	Arg	
				85					90					95		
Ile	Ser	Leu	Arg	Leu	Glu	Asn	Ile	Thr	Val	Leu	Asp	Ala	Gly	Leu	Tyr	
			100					105					110			
Gly	Cys	Arg	Ile	Ser	Ser	Gln	Ser	Tyr	Tyr	Gln	Lys	Ala	Ile	Trp	Glu	
		115					120					125				
Leu	Gln	Val	Ser	Ala	Leu	Gly	Ser	Val	Pro	Leu	Ile	Ser	Ile	Thr	Gly	
	130					135					140					
Tyr	Val	Asp	Arg	Asp	Ile	Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe	
145					150					155					160	
Pro	Arg	Pro	Thr	Ala	Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	
				165					170					175		
Thr	Asp	Ser	Arg	Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu	
			180					185					190			
Ile	Ser	Leu	Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met	
		195					200						205			
Arg	His	Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly	
	210					215					220					
Asp	Thr	Phe	Phe	Glu	Pro	Ile	Ser	Trp	His	Leu	Ala	Thr	Lys	Val	Leu	
225					230					235					240	
Gly	Ile	Leu	Cys	Cys	Gly	Leu	Phe	Phe	Gly	Ile	Val	Gly	Leu	Lys	Ile	
			245						250					255		
Phe	Phe	Ser	Lys	Phe	Gln	Trp	Lys	Ile	Gln	Ala	Glu	Leu	Asp	Trp	Arg	
			260					265					270			
Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys	His	Ala	Val	
		275					280					285				
Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys	Leu	Cys	Val	Ser	
	290					295					300					
Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro	Gln	Glu	Val	Pro	His	
305					310					315					320	
Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val	Val	Ala	Ser	Gln	Ser	Phe	
			325						330					335		
Gln	Ala	Gly	Lys	His	Tyr	Trp	Glu	Val	Asp	Gly	Gly	His	Asn	Lys	Arg	
		340						345					350			
Trp	Arg	Val	Gly	Val	Cys	Arg	Asp	Asp	Val	Asp	Arg	Arg	Lys	Glu	Tyr	
		355					360					365				
Val	Thr	Leu	Ser	Pro	Asp	His	Gly	Tyr	Trp	Val	Leu	Arg	Leu	Asn	Gly	
	370					375					380					

Glu His Leu Tyr Phe Thr Leu Asn Pro Arg Phe Ile Ser Val Phe Pro
 385 390 395 400

Arg Thr Pro Pro Thr Lys Ile Gly Val Phe Leu Asp Tyr Glu Cys Gly
 405 410 415

Thr Ile Ser Phe Phe Asn Ile Asn Asp Gln Ser Leu Ile Tyr Thr Leu
 420 425 430

Thr Cys Arg Phe Glu Gly Leu Leu Arg Pro Tyr Ile Glu Tyr Pro Ser
 435 440 445

Tyr Asn Glu Gln Asn Gly Thr Pro Arg Asp Lys Gln Gln
 450 455 460

<210> 21
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 21
 Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile
 1 5 10

<210> 22
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 22
 Leu Phe Leu Leu Leu Glu Ile Ser Thr His Leu Cys Phe Trp Lys Ser
 1 5 10 15

Leu Arg Lys Leu Glu Gly Lys
 20

<210> 23
 <211> 93
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (89)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (92)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 23
 Met Ile Phe Leu Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln
 1 5 10 15

Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
 . 20 25 30
 Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
 35 40 45
 His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
 50 55 60
 Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
 65 70 75 80
 Pro Leu Gly Lys Ala Ser Phe Pro Xaa Leu Lys Xaa Lys
 85 90

<210> 24

<211> 461

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (234)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (236)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 24

Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly Ser
 1 5 10 15

Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala Leu Val
 20 25 30

Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys Thr Asn Ala
 35 40 45

Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe Ser Ser Val Val
 50 55 60

His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe Met Gln Met Pro Gln
 65 70 75 80

Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp Ser Ile Ala Glu Gly Arg
 85 90 95

Ile Ser Leu Arg Leu Glu Asn Ile Thr Val Leu Asp Ala Gly Leu Tyr
 100 105 110

Gly Cys Arg Ile Ser Ser Gln Ser Tyr Tyr Gln Lys Ala Ile Trp Glu
 115 120 125

Leu Gln Val Ser Ala Leu Gly Ser Val Pro Leu Ile Ser Ile Thr Gly
 130 135 140

Tyr	Val	Asp	Arg	Asp	Ile	Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe	145	150	155	160
Pro	Arg	Pro	Thr	Ala	Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	165	170		175
Thr	Asp	Ser	Arg	Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu	180	185	190	
Ile	Ser	Leu	Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met	195	200	205	
Arg	His	Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly	210	215	220	
Asp	Thr	Phe	Phe	Glu	Pro	Ile	Ser	Trp	Xaa	Leu	Xaa	Thr	Lys	Val	Leu	225	230	235	240
Gly	Ile	Leu	Cys	Cys	Gly	Leu	Phe	Phe	Gly	Ile	Val	Gly	Leu	Lys	Ile	245	250	255	
Phe	Phe	Ser	Lys	Phe	Gln	Trp	Lys	Ile	Gln	Ala	Glu	Leu	Asp	Trp	Arg	260	265	270	
Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys	His	Ala	Val	275	280	285	
Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys	Leu	Cys	Val	Ser	290	295	300	
Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro	Gln	Glu	Val	Pro	His	305	310	315	320
Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val	Val	Ala	Ser	Gln	Ser	Phe	325	330	335	
Gln	Ala	Gly	Lys	His	Tyr	Trp	Glu	Val	Asp	Gly	Gly	His	Asn	Lys	Arg	340	345	350	
Trp	Arg	Val	Gly	Val	Cys	Arg	Asp	Asp	Val	Asp	Arg	Arg	Lys	Glu	Tyr	355	360	365	
Val	Thr	Leu	Ser	Pro	Asp	His	Gly	Tyr	Trp	Val	Leu	Arg	Leu	Asn	Gly	370	375	380	
Glu	His	Leu	Tyr	Phe	Thr	Leu	Asn	Pro	Arg	Phe	Ile	Ser	Val	Phe	Pro	385	390	395	400
Arg	Thr	Pro	Pro	Thr	Lys	Ile	Gly	Val	Phe	Leu	Asp	Tyr	Glu	Cys	Gly	405	410	415	
Thr	Ile	Ser	Phe	Phe	Asn	Ile	Asn	Asp	Gln	Ser	Leu	Ile	Tyr	Thr	Leu	420	425	430	
Thr	Cys	Arg	Phe	Glu	Gly	Leu	Leu	Arg	Pro	Tyr	Ile	Glu	Tyr	Pro	Ser	435	440	445	
Tyr	Asn	Glu	Gln	Asn	Gly	Thr	Pro	Arg	Asp	Lys	Gln	Gln				450	455	460	

<210> 25
 <211> 402
 <212> PRT
 <213> Homo sapiens

<400> 25
 Met Glu Pro Ala Ala Ala Leu His Phe Ser Arg Pro Ala Ser Leu Leu
 1 5 10 15
 Leu Leu Leu Ser Leu Cys Ala Leu Val Ser Ala Gln Phe Thr Val Val
 20 25 30
 Gly Pro Ala Asn Pro Ile Leu Ala Met Val Gly Glu Asn Thr Thr Leu
 35 40 45
 Arg Cys His Leu Ser Pro Glu Lys Asn Ala Glu Asp Met Glu Val Arg
 50 55 60
 Trp Phe Arg Ser Gln Phe Ser Pro Ala Val Phe Val Tyr Lys Gly Gly
 65 70 75 80
 Arg Glu Arg Thr Glu Glu Gln Met Glu Glu Tyr Arg Gly Arg Ile Thr
 85 90 95
 Phe Val Ser Lys Asp Ile Asn Arg Gly Ser Val Ala Leu Val Ile His
 100 105 110
 Asn Val Thr Ala Gln Glu Asn Gly Ile Tyr Arg Cys Tyr Phe Gln Glu
 115 120 125
 Gly Arg Ser Tyr Asp Glu Ala Ile Leu Arg Leu Val Val Ala Gly Leu
 130 135 140
 Gly Ser Lys Pro Leu Ile Glu Ile Lys Ala Gln Glu Asp Gly Ser Ile
 145 150 155 160
 Trp Leu Glu Cys Ile Ser Gly Gly Trp Tyr Pro Glu Pro Leu Thr Val
 165 170 175
 Trp Arg Asp Pro Tyr Gly Glu Val Val Pro Ala Leu Lys Glu Val Ser
 180 185 190
 Ile Ala Asp Ala Asp Gly Leu Phe Met Val Thr Thr Ala Val Ile Ile
 195 200 205
 Arg Asp Lys Tyr Val Arg Asn Val Ser Cys Ser Val Asn Asn Thr Leu
 210 215 220
 Leu Gly Gln Glu Lys Glu Thr Val Ile Phe Ile Pro Glu Ser Phe Met
 225 230 235 240
 Pro Ser Ala Ser Pro Trp Met Val Ala Leu Ala Val Ile Leu Thr Ala
 245 250 255
 Ser Pro Trp Met Val Ser Met Thr Val Ile Leu Ala Val Phe Ile Ile
 260 265 270

Phe Met Ala Val Ser Ile Cys Cys Ile Lys Lys Leu Gln Arg Glu Lys
 275 280 285

Lys Ile Leu Ser Gly Glu Lys Lys Val Glu Gln Glu Glu Lys Glu Ile
 290 295 300

Ala Gln Gln Leu Gln Glu Glu Leu Arg Trp Arg Arg Thr Phe Leu His
 305 310 315 320

Ala Ala Asp Val Val Leu Asp Pro Asp Thr Ala His Pro Glu Leu Phe
 325 330 335

Leu Ser Glu Asp Arg Arg Ser Val Arg Arg Gly Pro Tyr Arg Gln Arg
 340 345 350

Val Pro Asp Asn Pro Glu Arg Phe Asp Ser Gln Pro Cys Val Leu Gly
 355 360 365

Trp Glu Ser Phe Ala Ser Gly Lys His Tyr Arg Gly Asn Phe Thr Glu
 370 375 380

Trp Gly Pro Thr Arg Ala Tyr Arg Ile Asn Ser Leu Asp Ser Gln Pro
 385 390 395 400

Cys Arg

<210> 26
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 26
 Ser Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp Ala
 1 5 10 15

Leu Leu Pro Leu
 20

<210> 27
 <211> 255
 <212> PRT
 <213> Homo sapiens

<400> 27
 Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile Ile
 1 5 10 15

Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly Ile Ser
 20 25 30

Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala Gly Asn Ile
 35 40 45

Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro Asp Ile Lys Leu
 50 55 60

Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly Val Leu Gly Leu Val
 65 70 75 80
 His Glu Phe Lys Glu Gly Lys Asp Glu Leu Ser Glu Gln Asp Glu Met
 85 90 95
 Phe Arg Gly Arg Thr Ala Val Phe Ala Asp Gln Val Ile Val Gly Asn
 100 105 110
 Ala Ser Leu Arg Leu Lys Asn Val Gln Leu Thr Asp Ala Gly Thr Tyr
 115 120 125
 Lys Cys Tyr Ile Ile Thr Ser Lys Gly Lys Gly Asn Ala Asn Leu Glu
 130 135 140
 Tyr Lys Thr Gly Ala Phe Ser Met Pro Glu Val Asn Val Asp Tyr Asn
 145 150 155 160
 Ala Ser Ser Glu Thr Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln
 165 170 175
 Pro Thr Val Val Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser
 180 185 190
 Glu Val Ser Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met
 195 200 205
 Lys Val Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser
 210 215 220
 Cys Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val
 225 230 235 240
 Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn
 245 250 255
 <210> 28
 <211> 231
 <212> PRT
 <213> Homo sapiens
 <400> 28
 Leu Ile Ile Gly Phe Gly Ile Ser Gly Arg His Ser Ile Thr Val Thr
 1 5 10 15
 Thr Val Ala Ser Ala Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys
 20 25 30
 Thr Phe Glu Pro Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu
 35 40 45
 Lys Glu Gly Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp
 50 55 60
 Glu Leu Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe
 65 70 75 80

Ala Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val
85 90 95

Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser Lys
100 105 110

Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe Ser Met
115 120 125

Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr Leu Arg Cys
130 135 140

Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val Trp Ala Ser Gln
145 150 155 160

Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser Asn Thr Ser Phe Glu
165 170 175

Leu Asn Ser Glu Asn Val Thr Met Lys Val Val Ser Val Leu Tyr Asn
180 185 190

Val Thr Ile Asn Asn Thr Tyr Ser Cys Met Ile Glu Asn Asp Ile Ala
195 200 205

Lys Ala Thr Gly Asp Ile Lys Val Thr Glu Ser Glu Ile Lys Arg Arg
210 215 220

Ser His Leu Gln Leu Leu Asn
225 230

<210> 29

<211> 24

<212> PRT

<213> Homo sapiens

<400> 29

Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile Ile
1 5 10 15

Ile Ile Leu Ala Gly Ala Ile Ala
20

<210> 30

<211> 30

<212> PRT

<213> Homo sapiens

<400> 30

Pro Thr Trp Leu Leu His Ile Phe Ile Pro Ser Cys Ile Ile Ala Phe
1 5 10 15

Ile Phe Ile Ala Thr Val Ile Ala Leu Arg Lys Gln Leu Cys
20 25 30

<210> 31
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 31
 Met Ile Phe Leu Leu Leu Met Leu Ser Leu Glu Leu Gln Leu His Gln
 1 5 10 15
 Ile Ala Ala Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile
 20 25 30
 Glu His Gly Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser
 35 40 45
 His Val Asn Leu Gly Ala Ile Thr Ala Ser Leu Gln Lys Val Glu Asn
 50 55 60
 Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu Leu Glu Glu Gln Leu
 65 70 75 80
 Pro Leu Gly Lys Ala Ser Phe His Ile Pro Gln Val Gln Val Arg Asp
 85 90 95
 Glu Gly Gln Tyr Gln Cys Ile Ile Ile Tyr Gly Val Ala Trp Asp Tyr
 100 105 110
 Lys Tyr Leu Thr Leu Lys Val Lys Ala Ser Tyr Arg Lys Ile Asn Thr
 115 120 125
 His Ile Leu Lys Val Pro Glu Thr Asp Glu Val Glu Leu Thr Cys Gln
 130 135 140
 Ala Thr Gly Tyr Pro Leu Ala Glu Val Ser Trp Pro Asn Val Ser Val
 145 150 155 160
 Pro Ala Asn Thr Ser His Ser Arg Thr Pro Glu Gly Leu Tyr Gln Val
 165 170 175
 Thr Ser Val Leu Arg Leu Lys Pro Pro Pro Gly Arg Asn Phe Ser Cys
 180 185 190
 Val Phe Trp Asn Thr His Val Arg Glu Leu Thr Leu Ala Ser Ile Asp
 195 200 205
 Leu Gln Ser Gln Met Glu Pro Arg Thr His
 210 215

<210> 32
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 32
 Leu Phe Thr Val Thr Val Pro Lys Glu Leu Tyr Ile Ile Glu His Gly
 1 5 10 15
 Ser Asn Val Thr Leu Glu Cys Asn Phe Asp Thr Gly Ser His Val Asn

20 25 30
 Gln Lys Val Glu Asn Asp Thr Ser Pro His Arg Glu Arg Ala Thr Leu
 35 40 45
 Leu Glu Glu Gln Leu Pro Leu Gly Lys Ala Ser Phe His Ile Pro Gln
 50 55 60
 Val Gln Val Arg Asp Glu Gly Gln Tyr Gln Cys Ile Ile Ile Tyr Gly
 65 70 75 80
 Val Ala Trp Asp Tyr Lys Tyr Leu Thr Leu Lys Val Lys
 85 90

<210> 35
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 35
 Ser Tyr Arg Lys Ile Asn Thr His Ile Leu Lys Val Pro Glu Thr Asp
 1 5 10 15
 Glu Val Glu Leu Thr Cys Gln Ala Thr Gly Tyr Pro Leu Ala Glu Val
 20 25 30
 Ser Trp Pro Asn Val Ser Val Pro Ala Asn Thr Ser His Ser Arg Thr
 35 40 45
 Pro Glu Gly Leu Tyr Gln Val Thr Ser Val Leu Arg Leu Lys Pro Pro
 50 55 60
 Pro Gly Arg Asn Phe Ser Cys Val Phe Trp Asn Thr His Val Arg Glu
 65 70 75 80
 Leu Thr Leu Ala Ser Ile Asp Leu Gln Ser Gln Met Glu Pro
 85 90

<210> 36
 <211> 301
 <212> PRT
 <213> Homo sapiens

<400> 36
 Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala Leu Val Gly
 1 5 10 15
 Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys Thr Asn Ala Glu
 20 25 30
 Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe Ser Ser Val Val His
 35 40 45
 Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe Met Gln Met Pro Gln Tyr
 50 55 60

Gln Gly Arg Thr Lys Leu Val Lys Asp Ser Ile Ala Glu Gly Arg Ile
 65 70 75 80
 Ser Leu Arg Leu Glu Asn Ile Thr Val Leu Asp Ala Gly Leu Tyr Gly
 85 90 95
 Cys Arg Ile Ser Ser Gln Ser Tyr Tyr Gln Lys Ala Ile Trp Glu Leu
 100 105 110
 Gln Val Ser Ala Leu Gly Ser Val Pro Leu Ile Ser Ile Ala Gly Tyr
 115 120 125
 Val Asp Arg Asp Ile Gln Leu Leu Cys Gln Ser Ser Gly Trp Phe Pro
 130 135 140
 Arg Pro Thr Ala Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Thr
 145 150 155 160
 Asp Ser Arg Thr Asn Arg Asp Met His Gly Leu Phe Asp Val Glu Ile
 165 170 175
 Ser Leu Thr Val Gln Glu Asn Ala Gly Ser Ile Ser Cys Ser Met Arg
 180 185 190
 His Ala His Leu Ser Arg Glu Val Glu Ser Arg Val Gln Ile Gly Asp
 195 200 205
 Trp Arg Arg Lys His Gly Gln Ala Gly Lys Arg Lys Tyr Ser Ser Ser
 210 215 220
 His Ile Tyr Asp Ser Phe Pro Ser Leu Ser Phe Met Asp Phe Tyr Ile
 225 230 235 240
 Leu Arg Pro Val Gly Pro Cys Arg Ala Lys Leu Val Met Gly Thr Leu
 245 250 255
 Lys Leu Gln Ile Leu Gly Glu Val His Phe Val Glu Lys Pro His Ser
 260 265 270
 Leu Leu Gln Ile Ser Gly Gly Ser Thr Thr Leu Lys Lys Gly Pro Asn
 275 280 285
 Pro Trp Ser Phe Pro Ser Pro Cys Ala Leu Phe Pro Thr
 290 295 300

<210> 37

<211> 17

<212> PRT

<213> Homo sapiens

<400> 37

Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly Ser
 1 5 10 15

Gly

<210> 38
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 38
 Thr Ala Ser Pro Trp Met Val Ser Met Thr Val Ile Leu Ala Val Phe
 1 5 10 15

 Ile Ile Phe Met Ala Val Ser Ile Cys Cys
 20 25

<210> 39
 <211> 254
 <212> PRT
 <213> Homo sapiens

<400> 39
 Met Glu Pro Ala Ala Ala Leu His Phe Ser Arg Pro Ala Ser Leu Leu
 1 5 10 15

 Leu Leu Leu Ser Leu Cys Ala Leu Val Ser Ala Gln Phe Thr Val Val
 20 25 30

 Gly Pro Ala Asn Pro Ile Leu Ala Met Val Gly Glu Asn Thr Thr Leu
 35 40 45

 Arg Cys His Leu Ser Pro Glu Lys Asn Ala Glu Asp Met Glu Val Arg
 50 55 60

 Trp Phe Arg Ser Gln Phe Ser Pro Ala Val Phe Val Tyr Lys Gly Gly
 65 70 75 80

 Arg Glu Arg Thr Glu Glu Gln Met Glu Glu Tyr Arg Gly Arg Ile Thr
 85 90 95

 Phe Val Ser Lys Asp Ile Asn Arg Gly Ser Val Ala Leu Val Ile His
 100 105 110

 Asn Val Thr Ala Gln Glu Asn Gly Ile Tyr Arg Cys Tyr Phe Gln Glu
 115 120 125

 Gly Arg Ser Tyr Asp Glu Ala Ile Leu Arg Leu Val Val Ala Gly Leu
 130 135 140

 Gly Ser Lys Pro Leu Ile Glu Ile Lys Ala Gln Glu Asp Gly Ser Ile
 145 150 155 160

 Trp Leu Glu Cys Ile Ser Gly Gly Trp Tyr Pro Glu Pro Leu Thr Val
 165 170 175

 Trp Arg Asp Pro Tyr Gly Glu Val Val Pro Ala Leu Lys Glu Val Ser
 180 185 190

 Ile Ala Asp Ala Asp Gly Leu Phe Met Val Thr Thr Ala Val Ile Ile
 195 200 205

Arg Asp Lys Tyr Val Arg Asn Val Ser Cys Ser Val Asn Asn Thr Leu
210 215 220

Leu Gly Gln Glu Lys Glu Thr Val Ile Phe Ile Pro Glu Ser Phe Met
225 230 235 240

Pro Ser Ala Ser Pro Trp Met Val Ala Leu Ala Val Ile Leu
245 250

<210> 40
<211> 227
<212> PRT
<213> Homo sapiens

<400> 40
Gln Phe Thr Val Val Gly Pro Ala Asn Pro Ile Leu Ala Met Val Gly
1 5 10 15

Glu Asn Thr Thr Leu Arg Cys His Leu Ser Pro Glu Lys Asn Ala Glu
20 25 30

Asp Met Glu Val Arg Trp Phe Arg Ser Gln Phe Ser Pro Ala Val Phe
35 40 45

Val Tyr Lys Gly Gly Arg Glu Arg Thr Glu Glu Gln Met Glu Glu Tyr
50 55 60

Arg Gly Arg Ile Thr Phe Val Ser Lys Asp Ile Asn Arg Gly Ser Val
65 70 75 80

Ala Leu Val Ile His Asn Val Thr Ala Gln Glu Asn Gly Ile Tyr Arg
85 90 95

Cys Tyr Phe Gln Glu Gly Arg Ser Tyr Asp Glu Ala Ile Leu Arg Leu
100 105 110

Val Val Ala Gly Leu Gly Ser Lys Pro Leu Ile Glu Ile Lys Ala Gln
115 120 125

Glu Asp Gly Ser Ile Trp Leu Glu Cys Ile Ser Gly Gly Trp Tyr Pro
130 135 140

Glu Pro Leu Thr Val Trp Arg Asp Pro Tyr Gly Glu Val Val Pro Ala
145 150 155 160

Leu Lys Glu Val Ser Ile Ala Asp Ala Asp Gly Leu Phe Met Val Thr
165 170 175

Thr Ala Val Ile Ile Arg Asp Lys Tyr Val Arg Asn Val Ser Cys Ser
180 185 190

Val Asn Asn Thr Leu Leu Gly Gln Glu Lys Glu Thr Val Ile Phe Ile
195 200 205

Pro Glu Ser Phe Met Pro Ser Ala Ser Pro Trp Met Val Ala Leu Ala
210 215 220

Val Ile Leu
225

<210> 41
<211> 27
<212> PRT
<213> Homo sapiens

<400> 41
Met Glu Pro Ala Ala Ala Leu His Phe Ser Arg Pro Ala Ser Leu Leu
1 5 10 15
Leu Leu Leu Ser Leu Cys Ala Leu Val Ser Ala
20 25

<210> 42
<211> 20
<212> PRT
<213> Homo sapiens

<400> 42
Gly Pro Thr Gly Ala Arg Leu Thr Leu Val Leu Ala Leu Thr Val Ile
1 5 10 15
Leu Glu Leu Thr
20

<210> 43
<211> 394
<212> PRT
<213> Homo sapiens

<400> 43
Met Arg Glu Ile Val Trp Tyr Arg Val Thr Asp Gly Gly Thr Ile Lys
1 5 10 15
Gln Lys Ile Phe Thr Phe Asp Ala Met Phe Ser Thr Asn Tyr Ser His
20 25 30
Met Glu Asn Tyr Arg Lys Arg Glu Asp Leu Val Tyr Gln Ser Thr Val
35 40 45
Arg Leu Pro Glu Val Arg Ile Ser Asp Asn Gly Pro Tyr Glu Cys His
50 55 60
Val Gly Ile Tyr Asp Arg Ala Thr Arg Glu Lys Val Val Leu Ala Ser
65 70 75 80
Gly Asn Ile Phe Leu Asn Val Met Ala Pro Pro Thr Ser Ile Glu Val
85 90 95
Val Ala Ala Asp Thr Pro Ala Pro Phe Ser Arg Tyr Gln Ala Gln Asn
100 105 110
Phe Thr Leu Val Cys Ile Val Ser Gly Gly Lys Pro Ala Pro Met Val
115 120 125

Tyr Phe Lys Arg Asp Gly Glu Pro Ile Asp Ala Val Pro Leu Ser Glu
130 135 140
Pro Pro Ala Ala Ser Ser Gly Pro Leu Gln Asp Ser Arg Pro Phe Arg
145 150 155 160
Ser Leu Leu His Arg Asp Leu Asp Asp Thr Lys Met Gln Lys Ser Leu
165 170 175
Ser Leu Leu Asp Ala Glu Asn Arg Gly Gly Arg Pro Tyr Thr Glu Arg
180 185 190
Pro Ser Arg Gly Leu Thr Pro Asp Pro Asn Ile Leu Leu Gln Pro Thr
195 200 205
Thr Glu Asn Ile Pro Glu Thr Val Val Ser Arg Glu Phe Pro Arg Trp
210 215 220
Val His Ser Ala Glu Pro Thr Tyr Phe Leu Arg His Ser Arg Thr Pro
225 230 235 240
Ser Ser Asp Gly Thr Val Glu Val Arg Ala Leu Leu Thr Trp Thr Leu
245 250 255
Asn Pro Gln Ile Asp Asn Glu Ala Leu Phe Ser Cys Glu Val Lys His
260 265 270
Pro Ala Leu Ser Met Pro Met Gln Ala Glu Val Thr Leu Val Ala Pro
275 280 285
Lys Gly Pro Lys Ile Val Met Thr Pro Ser Arg Ala Arg Val Gly Asp
290 295 300
Thr Val Arg Ile Leu Val His Gly Phe Gln Asn Glu Val Phe Pro Glu
305 310 315 320
Pro Met Phe Thr Trp Thr Arg Val Gly Ser Arg Leu Leu Asp Gly Ser
325 330 335
Ala Glu Phe Asp Gly Lys Glu Leu Val Leu Glu Arg Val Pro Ala Glu
340 345 350
Leu Asn Gly Ser Met Tyr Arg Cys Thr Ala Gln Asn Pro Leu Gly Ser
355 360 365
Thr Asp Thr His Thr Arg Leu Ile Val Phe Glu Asn Pro Asn Ile Pro
370 375 380
Arg Gly Thr Glu Asp Ser Asn Gly Ser Ile
385 390

<210> 44
<211> 132
<212> PRT
<213> Homo sapiens

<400> 44

Gln Val Thr Val Val Gly Pro Thr Asp Pro Ile Leu Ala Met Val Gly
 1 5 10 15
 Glu Asn Thr Thr Leu Arg Cys Cys Leu Ser Pro Glu Glu Asn Ala Glu
 20 25 30
 Asp Met Glu Val Arg Trp Phe Gln Ser Gln Phe Ser Pro Ala Val Phe
 35 40 45
 Val Tyr Lys Gly Gly Arg Glu Arg Thr Glu Glu Gln Lys Glu Glu Tyr
 50 55 60
 Arg Gly Arg Thr Thr Phe Val Ser Lys Asp Ser Arg Gly Ser Val Ala
 65 70 75 80
 Leu Ile Ile His Asn Val Thr Ala Glu Asp Asn Gly Ile Tyr Gln Cys
 85 90 95
 Tyr Phe Gln Glu Gly Arg Ser Cys Asn Glu Ala Ile Leu His Leu Val
 100 105 110
 Val Ala Asp Gln His Asn Pro Leu Ser Trp Ile Pro Ile Pro Gln Gly
 115 120 125
 Thr Leu Ser Leu
 130

<210> 45
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 45
 Met Glu Pro Ala Ala Ala Leu His Phe Ser Arg Pro Ala Ser Leu Leu
 1 5 10 15
 Leu Leu Leu Ser Leu Cys Ala Leu Val Ser Ala
 20 25

<210> 46
 <211> 13
 <212> PRT
 <213> Homo sapiens

<400> 46
 Leu Gly Ile Leu Cys Cys Gly Leu Phe Phe Gly Ile Val
 1 5 10

<210> 47
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 47
 Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly Ser
 1 5 10 15

Gly

<210> 48
<211> 239
<212> PRT
<213> Homo sapiens

<400> 48

```
Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly Ser
  1              5              10              15

Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala Leu Val
      20              25              30

Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys Thr Asn Ala
      35              40              45

Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe Ser Ser Val Val
      50              55              60

His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe Met Gln Met Pro Gln
      65              70              75              80

Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp Ser Ile Ala Glu Gly Arg
      85              90              95

Ile Ser Leu Arg Leu Glu Asn Ile Thr Val Leu Asp Ala Gly Leu Tyr
      100             105             110

Gly Cys Arg Ile Ser Ser Gln Ser Tyr Tyr Gln Lys Ala Ile Trp Glu
      115             120             125

Leu Gln Val Ser Ala Leu Gly Ser Val Pro Leu Ile Ser Ile Thr Gly
      130             135             140

Tyr Val Asp Arg Asp Ile Gln Leu Leu Cys Gln Ser Ser Gly Trp Phe
      145             150             155             160

Pro Arg Pro Thr Ala Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser
      165             170             175

Thr Asp Ser Arg Thr Asn Arg Asp Met His Gly Leu Phe Asp Val Glu
      180             185             190

Ile Ser Leu Thr Val Gln Glu Asn Ala Gly Ser Ile Ser Cys Ser Met
      195             200             205

Arg His Ala His Leu Ser Arg Glu Val Glu Ser Arg Val Gln Ile Gly
      210             215             220

Asp Thr Phe Phe Glu Pro Ile Ser Trp His Leu Ala Thr Lys Val
      225             230             235
```

<210> 49
<211> 222

<212> PRT

<213> Homo sapiens

<400> 49

Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala Leu Val Gly
1 5 10 15
Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys Thr Asn Ala Glu
20 25 30
Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe Ser Ser Val Val His
35 40 45
Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe Met Gln Met Pro Gln Tyr
50 55 60
Gln Gly Arg Thr Lys Leu Val Lys Asp Ser Ile Ala Glu Gly Arg Ile
65 70 75 80
Ser Leu Arg Leu Glu Asn Ile Thr Val Leu Asp Ala Gly Leu Tyr Gly
85 90 95
Cys Arg Ile Ser Ser Gln Ser Tyr Tyr Gln Lys Ala Ile Trp Glu Leu
100 105 110
Gln Val Ser Ala Leu Gly Ser Val Pro Leu Ile Ser Ile Thr Gly Tyr
115 120 125
Val Asp Arg Asp Ile Gln Leu Leu Cys Gln Ser Ser Gly Trp Phe Pro
130 135 140
Arg Pro Thr Ala Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Thr
145 150 155 160
Asp Ser Arg Thr Asn Arg Asp Met His Gly Leu Phe Asp Val Glu Ile
165 170 175
Ser Leu Thr Val Gln Glu Asn Ala Gly Ser Ile Ser Cys Ser Met Arg
180 185 190
His Ala His Leu Ser Arg Glu Val Glu Ser Arg Val Gln Ile Gly Asp
195 200 205
Thr Phe Phe Glu Pro Ile Ser Trp His Leu Ala Thr Lys Val
210 215 220